

Historic, Archive Document

Do not assume content reflects current
scientific knowledge, policies, or practices.

1
A98410 10 #352
2

5
WHAT
IS
BLISTER
RUST
ANYWAY

CONTROL OF WHITE PINE BLISTER RUST

?

CAN
THIS
DISEASE
BE
CONTROLLED

?

OK
WHAT
DO I
DO
NOW



Why talk to me about it ?

BECAUSE you're an important person. You . . . and millions like you own three-quarters of the Nation's commercial timberland.

BECAUSE 80 percent of all sawtimber is softwood. White pines are among the most desirable and useful of softwood trees.

BECAUSE blister rust is not a native American disease. There are no natural predators to help keep it under control.

BECAUSE blister rust spreads rapidly. It is not a respecter of ownership or boundary lines.

BECAUSE in order to control this disease everybody has to cooperate. Financial and technical aid is available to help **YOU** in this vital project.

WHAT
IS
BLISTER
RUST
ANYWAY

?

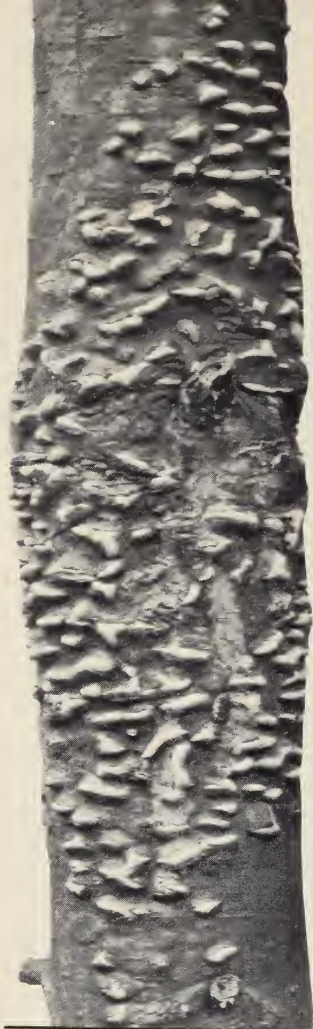
CAN
THIS
DISEASE
BE
CONTROLLED

?

OK
WHAT
DO I
DO
NOW

?

What is Blister Rust anyway ?

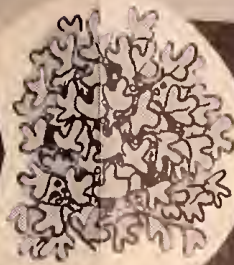


Blister rust is a tree disease. It is a fungus which attacks the bark of white, or five-needle, pines. Sores appear between the bark scales or ridges, growing in size as the infection spreads. This fungus can destroy white pines by completely girdling their trunks, thus stopping the movement of food and water within the tree. If blister rust is detected and controlled early enough, some of the larger infected trees can often be saved. Diseased saplings, however, may live only a few years if the infection is not checked. Blister rust shows no consideration of a tree's age or size. In a few months' time young seedlings can be girdled, killed, and left to disappear in the forest litter, leaving no evidence that they or the blister rust ever existed.

BLISTER RUST CYCLE



FROM
WHITE PINE
TO CURRANT
OR GOOSEBERRY
BUSHES



BACK TO
WHITE PINE



Can this disease be controlled?



It certainly can! The story of its control lies in the way the disease operates. Blister rust infects only white pines . . . no other trees. It cannot be transmitted directly from one pine to another. It has to spend certain stages of its life on gooseberry or currant bushes. Although blister rust is capable of spreading 100 or more miles from pine trees to these intermediate bushes, its spread from the bushes back to the pines seldom exceeds 1 mile. Tests show that this distance is usually limited to 900 feet. The fact that blister rust must spend part of its time on gooseberries or currants makes it practical for man to control this destructive disease.

The control job is primarily the destruction of currant and gooseberry bushes. There are many kinds of such bushes: Some are wild; others are cultivated; some are good hosts for the blister rust; others are not. In forest-land blister rust control we are principally interested in the wild variety and in cultivated types that are particularly damaging in spreading the disease.

Unfortunately, currant and gooseberry bushes grow

wild in most white pine forests, and in some sections grow quite abundantly. Frequently they establish themselves on recently disturbed soil, growing from seeds, sections of root crowns, or from layered stems. They are most persistent in moist, open places, reaching their maximum development in about 20 years. Often their seeds are stored in the forest soil; hence, when the litter or humus is disturbed by logging, fire, and other causes, the long-lived seeds germinate and establish new colonies of blister rust host plants.

The control of blister rust rests on three basic steps: Destroying currant and gooseberry bushes; managing the forest so as to retard regeneration of these shrubs; and eradicating those bushes that do manage to come in again.

Destruction of currant and gooseberry bushes only on the forest areas that bear good stands of white pine can accomplish satisfactory control. Such areas should be determined by an experienced blister rust technician. The services of these technicians are available in every major white pine area.



OK What do I do now?

The first step in blister rust control is to contact a blister rust technician. Survey your area with him. Decide if the white pine is abundant enough and of good enough quality to justify the cost of control. Find out the location and number of the currant and gooseberry bushes, and whether the surrounding conditions are favorable for their growth. Then plan your method of attack.

Chemicals may be used in eradication. Two weed killers, 2,4-D and 2,4,5-T, have proved most effective and generally economical. They can be applied in low enough dosages so as not to seriously harm wildlife, cultivated crops, or tree seedlings. Small hand or portable back-pack sprayers can be used for

applying the chemicals. Many of the bushes can also be destroyed by pulling or digging them up. A grubbing tool, resembling a forked-type mattock with clawlike prongs, is commonly used. Because these bushes can reproduce by layering, it is important not to leave their main root systems in the soil.

One final step: In any eradication job, regardless of the method, the work must be checked to see that enough of the currant and gooseberry bushes have been killed to effectively stop the spread of blister rust disease. Remember, some bushes can reoccur, so play safe . . . after several years check your white pine areas again.



Is this a 'Do it yourself' type program?

No, it is not! There are a lot of people who will be glad to give you a helping hand . . . not only with technical advice, but financially too. Responsibility for leadership in blister-rust control is assigned to the Forest Service, U. S. Department of Agriculture, and more than 30 States, as well as many counties, townships, timber companies, and private individuals are participating in this program to help you check white pine blister rust. The Federal Government, as deter-

mined by the Secretary of Agriculture and with funds appropriated by Congress, can pay up to 50 percent of the blister rust control cost on State and private lands. Many of the cooperating States contribute 50 percent or more toward this program. In white pine regions, disease-control specialists are available to inspect your land, suggest eradication measures, and discuss financial aid for blister rust control.



Where do I go from here?

That's the simplest job! To save the white pines, blister rust must be controlled. Therefore, currant and gooseberry bushes in certain forest areas must be destroyed.

Many private landowners need technical and possibly financial help in order to do this. Ask your State forester, Forest Service representative, or your county agent for further advice and assistance.

F-478431

8689



METHODS OF CONTROLLING BLISTER RUST

1. Chemically.
2. By hand or with use of special tools.

State Foresters or Other State Officials Who Can Furnish Help in Blister Rust Control

WRITE



PHONE



VISIT



STATE	NAME	TITLE	ADDRESS
California	F. H. Raymond...	State Forester.....	State Office Bldg. No. 1, Sacramento 14, Calif.
Connecticut.....	W. F. Schreeder...	State Forester.....	165 Capitol Ave., Hartford 15, Conn.
Delaware.....	W. S. Taber.....	State Forester.....	State House, Dover, Del.
Georgia.....	Guyton DeLoach...	Dir., For. Com.....	State Capitol, Atlanta 3, Ga.
Idaho.....	Roger L. Guernsey...	State Forester.....	State Capitol, Boise, Idaho.
Illinois.....	E. E. Nuuttila.....	State Forester.....	303 E. Monroe St., Springfield, Ill.
Indiana.....	Ralph F. Wilcox...	State Forester.....	311 W. Washington St., Indianapolis 9, Ind.
Iowa.....	M. A. Ellerhoff...	Supt. of Forests.....	East 7th and Court Sts., Des Moines 9, Iowa.
Kentucky.....	H. B. Newland...	Dir., Div. of For.....	Frankfort, Ky.
Maine.....	A. D. Nutting.....	Forest Commissioner...	Augusta, Maine.
Maryland.....	H. C. Buckingham...	State Forester.....	State Office Bldg., Annapolis, Md.
Massachusetts.....	Raymond J. Kenney...	Dir., Div. of For.....	15 Ashburton Pl., Boston 8, Mass.
Michigan.....	G. S. McIntire...	State Forester.....	Steven-Mason Bldg., Lansing 13, Mich.
Minnesota.....	Edward L. Lawson...	Dir., Div. of For.....	State Office Bldg., St. Paul 1, Minn.
Montana.....	Gareth C. Moon...	State Forester.....	Montana State Univ., Missoula, Mont.
New Hampshire.....	William H. Messeck...	State Forester.....	State Office Bldg., Concord, N. H.
New Jersey.....	Alden T. Cottrell...	State Forester.....	520 E. State St., Trenton 25, N. J.
New York.....	W. M. Foss.....	Dir. of Lands and For.....	Div. of Lands and Forests, Albany 1, N. Y.
North Carolina.....	F. H. Claridge...	State Forester.....	P. O. Box 2719, Raleigh, N. C.
Ohio.....	O. A. Alderman...	Chief, Div. of For.....	1500 Dublin Rd., Columbus, Ohio.
Oregon.....	Dwight Phipps...	State Forester.....	Salem, Oreg.
Pennsylvania.....	Ralph C. Wible...	Deputy Secretary.....	Dept. of Forests, Harrisburg, Pa.
Rhode Island.....	C. B. Dunwoody...	Acting Chief.....	Div. of For., Park St., Providence, R. I.
South Carolina.....	C. H. Flory.....	State Forester.....	P. O. Box 357, Columbia 1, S. C.
Tennessee.....	C. I. Peterson...	State Forester.....	Cordell Hull Office Bldg., Nashville 3, Tenn.
Vermont.....	Albert W. Gottlieb...	State Forester.....	Montpelier, Vt.
Virginia.....	George W. Dean...	State Forester.....	Box 3347, Univ. Sta., Charlottesville, Va.
Washington.....	L. T. Webster.....	State Supvr. Forestry.....	Olympia, Wash.
West Virginia.....	Lester McClung...	State Forester.....	Charleston 5, W. Va.
Wisconsin.....	John A. Beale...	State Forester.....	State Office Bldg., Madison 2, Wis.

